FAST FUEL FACTS

Natural Gas

FUEL DESCRIPTION

- Extracted from underground reserves; composed primarily of methane.
- For gaseous vehicle fuel (CNG), gas is compressed to 2,400-3,600 pounds per square inch in specially designed and constructed cylinders. For liquefied vehicle fuel (LNG), gas is cooled to minus 259°F and stored in insulated tanks.

DOMESTIC CONTENT OF FUEL

- Based on Energy Policy Act definition, 100%.

FUELING

- "Slow" fill (up to eight hours) and "quick" fill (three to five minutes) are available for CNG. LNG is dispensed like propane — refueling times are comparable to those for gasoline or diesel fuels.

FUEL AVAILABILITY

- CNG fueling stations are rapidly increasing in number; located in most major cities and in many rural areas. *Contact sources on back.*
- LNG is only available through suppliers of cryogenic liquids.

VEHICLE EXPERIENCE AND AVAILABILITY

- Over 30,000 in U.S. (especially in California, Colorado, Indiana, Oklahoma, Texas, and Washington state) and nearly one million worldwide.

Sponsored by the
U. S. Department of Energy
Energy Efficiency and Renewable Energy
Office of Transportation Technologies
with Support from the
U.S. Environmental Protection Agency

This document has been reviewed by selected representatives of vehicle manufacturers, fuel providers, fleet operators, and federal and state governments. A technical review committee has also reviewed the publication.

Printed on Recycled Paper 94-1

- Ford offers bi-fuel F-series pickup truck, E-series van, and entire car line as aftermarket conversions by Ford Qualified Vehicle Modifier; model year 1995 Crown Victoria available as OEM.
- Chrysler offers model year 1995 Ram (van/wagon, maxivan, pickup truck), Caravan/Voyager minivan, and Dakota pickup truck as OEMs.
- General Motors is expected to announce availability of model year 1995 bi-fuel Caprice and Corsica sedans, Topkick/Kodiak trucks, P Chassis step-van, and 3/4-ton GMC pickup truck as OEMs.
- CNG- or LNG-fueled specialty buses and service vehicles are available from at least 15 manufacturers.

OPERATIONAL PERFORMANCE

- Range of CNG vehicle is at least one-half that of comparable gasoline-fueled vehicle; LNG fuel tank range is just under two-thirds that of gasoline.
- Power, acceleration, payload, and cruise speed are comparable to those for equivalent internal-combustion engine.

MAINTENANCE AND RELIABILITY

- Most CNG fleets report good reliability, longer useful lifetimes, longer time between tune-ups and engine rebuilds; however, manufacturer/converter maintenance recommendations should always be followed.
- High-pressure tanks require periodic inspection and certification.

SAFETY

- Pressurized tanks have been designed to withstand severe impact and high external temperatures; they are as safe as gasoline tanks.
- Training is required to operate and maintain vehicles.

COSTS

- Fuel cost is approximately three-fourths that of gasoline; local utility rates vary.
- Conversion costs about $2,700 to $5,000 per vehicle. Manufacturer's extra price premium can be $3,500-$7,500.
- May need to purchase service and diagnostic equipment if access to commercial CNG/LNG vehicle maintenance facilities is not available.

Natural Gas

FOR MORE INFORMATION, CONTACT:

- Natural Gas Vehicle Coalition (703/527-3022)
- American Gas Association (703/841-8000)
- Gas Research Institute (312/399-8100)
- National Association of Fleet Administrators (908/494-8100)
- National Alternative Fuels Hotline (800/423-1DOE)
- Your local gas utility

Produces Less Air Toxics and Ozone-Forming Emissions than Gasoline